Why Are Seagrasses Important?

Seagrasses are flowering plants that produce oxygen through photosynthesis, and have leaves, stems, and roots that live submerged under the water. Just like the grass in your front yard provides habitat for worms, rodents, birds, and insects, seagrasses offer the same protection for marine life. Seagrasses are a significant part of the marine food chain; therefore they are some of the most productive communities on the planet. Without these seagrass beds, and the habitat they provide, we wouldn't have the diversity or populations of marine life that depend on these areas.

Why are seagrasses important to our water quality, birds, marine mammals, and commercial and recreational fishing? The roots and rhizomes of the plants trap sediments from the water column, thus reducing turbidity, which contributes to water clarity. The small organisms that live on and around seagrasses filter dissolved nutrients out of the water, promoting water quality. Many diving ducks feed directly on the seagrass beds, or on fish that live within the leaves. On low tides, wading shorebirds feed on shrimp, crabs and fish in these bountiful grasses. Endangered species such as manatees and green sea turtles depend on seagrass leaves for their food. As the leaves of the plants break off and decompose, they provide food for the microscopic organisms at the bottom of the food chain. These small organisms are food for juvenile fish, shrimp and crabs, which are food for larger prey. Seagrass beds are often known as "nursery" areas for juvenile fish, shrimp, and crabs. Some researchers estimate that as much as **90%** of commercial and recreational fish spend some time of their lives in seagrass beds! Seagrass beds are not only important to wildlife, but are also important for economic and recreational purposes.

Seagrass beds may be stressed by natural causes. Add the human impacts and the result is the loss of many of these ecologically, economically and recreationally important areas. Seagrasses are delicate communities that don't tolerate extremes of salinity (salt content of the water), turbidity (amount of sediment in the water, which blocks sunlight from the plants) or nutrients (usually associated with stormwater runoff and discharged wastewater). Dredge and fill activities and boat propellers also impact seagrasses. Natural impacts to

seagrasses may be caused by storms, burrowing activities and overgrazing by marine life.

What can you do to protect seagrasses?

I. If you run aground in a seagrass bed, turn off your engine, tilt it up and walk or pole your boat out of the shallow beds.

II. Know water depths and locations of seagrass beds by studying navigational charts.

III. Seagrasses are usually found in shallow water and appear as dark spots on the water. Wearing polarized sunglasses help locate these areas.

IV. Always use a pump-out station.

V. If you are a commercial or recreational shrimper and shrimping in a bay or bayou, try not to pull your otter trawl over seagrass beds.

VI. To reduce toxins and sediment from entering our waterways, keep a buffer of natural vegetation along your shoreline, this will also reduce erosion.

VII. To reduce excess nutrients, plant native plants not requiring high amounts of fertilizers and pesticides.

VIII. Avoid seagrass beds when planning for dredging activities or pier construction.

IX. Maintain septic tanks.

X. Get out and snorkel these incredibly diverse areas! Many are easy to access from public parks.

XI. Get involved with local organizations that promote water quality.

XII. Whether you live on the coast or our inland areas, everything we do impacts our water quality. Learn ways you can have less of an impact on our rivers, bays and bayous.

Chris Verlinde is Extension Marine Agent for Santa Rosa County.